



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

APR 13 2011

REPLY TO THE ATTENTION OF:

Don A. Smith  
Manager, Air Quality Permit Section  
Industrial Division  
Minnesota Pollution Control Agency  
520 Lafayette Road North  
Saint Paul, Minnesota 55155-4194

Dear Mr. Smith:

Thank you for your letter regarding establishing and modifying best available control technology (BACT) limits for the Fibrominn Biomass Power Plant (Fibrominn), located in Benson, Minnesota. Your letter requests confirmation that the U.S. Environmental Protection Agency agrees with the Minnesota Pollution Control Agency's (MPCA) determination on the permitting requirements of a facility establishing BACT limits. Moreover, the MPCA requests concurrence from the EPA on their position on permitting modifications to established BACT requirements.

As your letter noted, on November 25, 2002, Fibrominn received a combined construction and initial Title V operating permit for the construction of a 50 megawatt (MW) biomass-fueled power plant, consisting of one boiler, fueled primarily with poultry litter. The permit also allowed vegetative biomass to be burned as fuel. As part of this permitting action, Fibrominn was subject to preconstruction review under the Clean Air Act, Prevention of Significant Deterioration (PSD) program, (40 C.F.R. § 52.21) for PM, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOCs and sulfuric acid mist. Fibrominn was required to complete a BACT analysis for each of these pollutants, to model the surrounding areas to predict ambient impacts of the facility's operation, to perform an increment analysis and to address other impacts. However, at the time of permit issuance, a specific numeric PM<sub>10</sub> limit was not established. Instead, the permit was issued with a requirement that Fibrominn test their boiler for PM<sub>10</sub> within 180 days of startup, and quarterly thereafter, until it had collected five data sets. Fibrominn was then required to submit a proposed emission limit within 45 days of submitting the stack test results for the fifth set ("Test & Set"). Fibrominn did not comply with the "Test and Set" schedule as required by their PSD permit. Fibrominn currently has completed its testing and has submitted its proposed PM<sub>10</sub> "Test & Set" BACT limit.

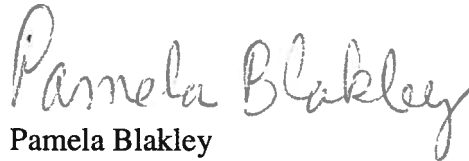
MPCA is requesting that the EPA concur with their determination that will require Fibrominn to (a) submit a major PSD permit modification application to modify the PM<sub>10</sub> BACT limit; (b) complete an updated PM<sub>10</sub> BACT analysis; (c) submit a revised ambient air quality analysis for PM<sub>10</sub> National Ambient Air Quality Standards (NAAQS) increment and additional impacts analysis, if the new limit proposed is higher than the level at which the modeling analysis was

initially conducted; (d) not apply recently promulgated rules, regulations and policies; and (e) submit a PM<sub>2.5</sub> modeling demonstration to confirm compliance with the PM<sub>2.5</sub> NAAQS.

Generally, the EPA agrees with the approach that MPCA has proposed for going forward with Fibrominn's air permitting action. Specifically, the EPA agrees with the MPCA's position that since the facility is modifying a BACT limit, it is required to submit a major PSD modification permit application. In the process of re-evaluating BACT, current BACT technology and requirements must be considered, including an updated PM<sub>10</sub> BACT analysis that supports and justifies the new BACT limit. The EPA also supports MPCA's position that Fibrominn must submit an ambient air quality demonstration for PM<sub>2.5</sub> that includes an increment and additional impact analysis. However, the EPA disagrees with MPCA that because the facility was initially permitted with a "Test & Set" BACT limit requirement and that the MPCA is in the process of completing the "set" requirement of the BACT limit, the facility does not have to adhere to promulgated rules, regulations and policies that have been set since the initial permit was issued. Because the facility did not comply with the "Test & Set" timeframe requirements, as set forth in the PSD permit, they must be required to re-evaluate BACT. The appropriate manner in which to set BACT for an emissions unit is through the PSD process, where the facility submits a new PSD permit application that meets all current regulations. In this case, an endangered species act consultation and a PM<sub>2.5</sub> BACT analysis should be completed.

If you have any questions or comments, please contact me or Jennifer A. Darrow, of my staff, at (312) 886-6315

Sincerely,

A handwritten signature in cursive script that reads "Pamela Blakley".

Pamela Blakley  
Chief  
Air Permits Section